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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,937

04/13/2006

Takeo Okabe

OGOSH51USA

7084

270 7590 10/07/2009  
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EXAMINER

BAND, MICHAEL A

ART UNIT

PAPER NUMBER

1795

NOTIFICATION DATE

DELIVERY MODE

10/07/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@howsonandhowson.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,937	<b>Applicant(s)</b> OKABE ET AL.	
	<b>Examiner</b> MICHAEL BAND	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-16 is/are pending in the application.
- 4a) Of the above claim(s) 1,2 and 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/5/2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of Group II, claims 5-6 and 9-12 in the reply filed on 9/1/2009 is acknowledged.

Claims 1-2 and 13-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/1/2009.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5-6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marx et al (US Patent No. 5,336,386) in view of Tanaka et al (JP No. 04231461).

With respect to claim 5, Marx et al discloses a target for cathode sputtering (abstract), where figs. 1-2 depict a cylindrical sputtering target [10] having a continuously concave top surface [17] (col. 3, lines 3-5). Since the target has a hollow space in the center as depicted in fig. 1, the target is considered a hollow cathode target. However Marx et al is limited in that while the cylindrical sputtering target is transported in a container, said container is not specified.

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Tanaka et al teaches a packaging method for a cylindrical sputter target [1] comprising a cylindrical packing plate protector (i.e. cover) [4], a bag-shaped material [6] covering said sputter target [1] and said protector [4], and a hole [5] designed as an air flow vent hole to provide a vacuum [7] through said protector [4] (abstract; figs. 1-3). Tanaka et al further teaches the bag-shaped material [6] is evacuated and sealed (abstract). The protector [4] is capable of covering a void (i.e. hollow space) in the sputter target [1] as evidenced by the identically shaped target disclosed in Marx et al (US Patent No. 5,336,386; fig. 1, [10], [17]). Despite Tanaka et al not specifying the material of the bag-shaped material, it is either inherent or obvious that said material is a plastic polymer (i.e. resin) since this type of material is immediately envisaged as the most commonly used material for use in bags as useful to seal against an outside environment and to maintain an inner vacuum environment. The plastic polymer is a resin as defined by *Merriam-Webster Online Dictionary* (see PTO-896 form, Reference U). Tanaka et al cites the advantage of using this packaging method as preventing adhesion of dust on the sputtering surface of the target and the damage of the sputtering surface (abstract).

It would have been obvious to one of ordinary skill in the art to use the packing method taught by Tanaka et al for the cylindrical sputtering target of Marx et al to gain the advantages of preventing adhesion of dust on the sputtering surface of the target and the damage of the sputtering surface.

With respect to claim 6, Tanaka et al further teaches in figs. 1-3 the bag-shaped material [6] appears to be transparent. In addition it would be obvious to try a

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transparent plastic resin as one of ordinary skill has good reason to pursue the known options within his or her grasp since said plastic resin can only be either transparent or opaque. In addition, it has been held that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. See MPEP2144.04, Section I. Therefore regardless of whether the plastic resin is transparent or opaque does not affect the ability of the bag-shaped material from maintaining a vacuum environment to prevent dust from contaminating the sputter target.

With respect to claims 9 and 11, Tanaka et al further teaches the bag-shaped material [6] is evacuated and sealed (abstract), therefore the said bag-shaped material [6] is impermeable to oxygen and moisture.

With respect to claims 10 and 12, Tanaka et al further teaches the cylindrical packing plate protector [6] is rigid and formed from a flat plate that maintains its shape after evacuation (abstract; figs. 1-3).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Band whose telephone number is (571) 272-9815. The examiner can normally be reached on Mon-Fri, 9am-5pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on (571) 272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. B./

Examiner, Art Unit 1795

/Jennifer K. Michener/

Supervisory Patent Examiner, Art Unit 1795